Serial No.: 10/820,581 Filed: April 7, 2004 Page: 2 of 14

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously presented) A method of modifying a heart valve of a patient, comprising:

advancing a catheter through the patient's vasculature into the heart from a vascular access point remote from the heart, the catheter having a first structure releasably coupled thereto;

deploying the first structure from the catheter on or near an annulus of the heart valve, the first structure adapted to modify the annulus so as to reduce regurgitation in the heart valve; and in combination with deploying the first structure from the catheter on or near the annulus of the heart valve, deploying a second structure that holds leaflets of the heart valve together so as to reduce regurgitation in the heart valve.

- 2. (Previously presented) A method as in claim 1, wherein the first structure comprises a ring that at least partially surrounds the annulus.
- 3. (Original) A method as in claim 1, wherein modifying the annulus comprises circumferentially shortening the annulus.
- 4. (Previously presented) A method as in claim 1, wherein deploying the first structure comprises deploying the first structure such that the first structure mounts onto an atrial side of the annulus.
- 5. (Original) A method as in claim 1, wherein modifying the annulus comprises tightening the annulus.

Serial No.: 10/820,581 Filed: April 7, 2004 Page: 3 of 14

- 6. (Original) A method as defined in claim 1, wherein holding the leaflets of the valve together comprises permanently attaching opposed points on or along the valve leaflets together.
- 7. (Original) A method as defined in claim 1, wherein holding the leaflets of the valve together comprises suturing, clipping, stapling, riveting, gluing, or fusing opposed points on or along the valve leaflets together.
- 8. (Original) A method as defined in claim 1, wherein holding the leaflets of the valve together is accomplished by linking opposed chordae of the valve leaflets together.
- 9. (Original) A method as defined in claim 8, wherein linking comprises suturing, capturing, fusing, clipping, or gluing the opposed chordae.
- 10. (Original) A method as defined in claim 1, wherein advancing the catheter comprises advancing the catheter across an interatrial septum of the heart.
- 11. (Original) A method of modifying a heart valve of a patient, comprising:
 advancing a catheter through the patient's vasculature into the heart from a vascular
 access point remote from the heart, the catheter having an annuloplasty device releasably
 coupled thereto;

implanting the annuloplasty device from the catheter at the heart valve to modify an annulus of the heart valve and reduce regurgitation in the heart valve;

in combination with implanting an annuloplasty device from the catheter at the heart valve, modifying a spatial relationship between a first valve leaflet and a second valve leaflet of the heart valve so as to reduce regurgitation in the heart valve.

Serial No.: 10/820,581 Filed: April 7, 2004 Page: 4 of 14

12. (Original) A method as defined in claim 11, wherein the spatial relationship between the first and second valve leaflets is modified by attaching opposed points on or along the valve leaflets together.

- 13. (Original) A method as defined in claim 11, wherein the spatial relationship between the first and second valve leaflets is modified by suturing, clipping, stapling, riveting, gluing, or fusing opposed points on or along the valve leaflets together.
- 14. (Original) A method as defined in claim 11, wherein the spatial relationship between the first and second valve leaflets is modified by linking opposed chordae of the valve leaflets together to cause the valve leaflets to move toward one another.
- 15. (Original) A method as defined in claim 14, wherein linking comprises suturing, capturing, fusing, clipping, or gluing the opposed chordae.
- 16. (Original) A method as defined in claim 11, wherein the spatial relationship between the first and second valve leaflets is modified by drawing opposed points of papillary muscles together to cause the valve leaflets to move toward one another.
- 17. (Original) A method as in claim 11, wherein modifying the annulus comprises circumferentially shortening the annulus.
- 18. (Original) A method as in claim 11, wherein the annuloplasty device is deployed on an atrial side of the annulus.
- 19. (Original) A method as in claim 11, wherein modifying the annulus comprises tightening the annulus.

Serial No.: 10/820,581 Filed: April 7, 2004 Page: 5 of 14

20. (Original) A method as defined in claim 11, wherein advancing the catheter comprises advancing the catheter across an interatrial septum of the heart.

21. (Previously presented) A method of modifying a heart valve of a patient, comprising:

advancing a catheter through the patient's vasculature into the heart from a vascular access point remote from the heart, the catheter having an annuloplasty device releasably coupled thereto;

implanting the annuloplasty device from the catheter at the heart valve to effect a geometric change in an annulus of the heart valve so as to reduce regurgitation in the heart valve; and

in combination with effecting a geometric change in an annulus of the heart valve, coapting leaflets of the heart valve so as to reduce regurgitation in the heart valve.

22. (Canceled)

- 23. (Original) A method as in claim 21, wherein effecting a geometric change in the annulus comprises circumferentially shortening the annulus.
- 24. (Previously presented) A method as in claim 21, wherein the annuloplasty device is deployed on an atrial side of the annulus.
- 25. (Original) A method as in claim 21, wherein effecting a geometric change in the annulus comprises tightening the annulus.
- 26. (Original) A method as defined in claim 21, wherein coapting the leaflets comprises suturing, clipping, stapling, riveting, gluing, or fusing opposed points on or along the valve leaflets together.

Serial No.: 10/820,581 Filed: April 7, 2004 Page: 6 of 14

27. (Original) A method of modifying a heart valve of a patient, comprising: advancing a catheter through the patient's vasculature into the heart from a vascular access point remote from the heart, the catheter having an annuloplasty device releasably coupled thereto;

implanting the annuloplasty device at the heart valve to modify an annulus of the heart valve and reduce regurgitation in the heart valve;

in combination with implanting an annuloplasty device at the heart valve, holding leaflets of the heart valve together at one or more adjacent locations in a manner that reduces regurgitation in the valve.

- 28. (Original) A method as in claim 27, wherein the annuloplasty device comprises a ring that at least partially surrounds the annulus.
- 29. (Original) A method as in claim 27, wherein modifying the annulus comprises circumferentially shortening the annulus.
- 30. (Previously presented) A method as in claim 27, wherein deploying the annuloplasty device comprises deploying the annuloplasty device on an atrial side of the annulus.
- 31. (Original) A method as in claim 27, wherein modifying the annulus comprises tightening the annulus.
- 32. (Original) A method as defined in claim 27, wherein holding the leaflets of the valve together comprises permanently attaching opposed points on or along the valve leaflets together.
- 33. (Original) A method as defined in claim 27, wherein holding the leaflets of the valve together comprises suturing, clipping, stapling, riveting, gluing, or fusing opposed points on or along the valve leaflets together.

Attorney's Docket No.: 17315-002002

Applicant: Deem et al.

Serial No.: 10/820,581 Filed: April 7, 2004

Page : 7 of 14

- 34. (Currently amended) A method as defined in claim 27, wherein holding the leaflets of the valve together is accomplished by linking opposed chordae of the valve leaflets together using a device that directly contacts the opposed chordae.
- 35. (Original) A method as defined in claim 34, wherein linking comprises suturing, capturing, fusing, clipping, or gluing the opposed chordae.